

Title: Pemodelan penjabaran skenario bagi penentuan kawasan perumahan. Kajian Kes: Kotamadya Denpasar, Bali - Indonesia.

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Abstract:

Land use planning involved the process of generating development alternative and determining strategic choices before an area can be developed. The use of current technology has contributed to better method of generating choices of development strategies which consequently result in an ideal use of land. The approach of Planning Support System (PSS) that has been developed based on Geographical Information Systems (GIS) can be used to generate various development scenarios. These scenario can be used to determine suitability of land use activities based on various assumptions, factors and criteria. This study focused on the method of generating and evaluating of housing scenario using the developed Planning Support System. The model is tested in Denpasar Municipality, Bali, Indonesia as the study area. The suitability of housing location is analyzed using physical factors as the main criterion in generating development alternatives. The physical factors include slope, risk area, soil type, road buffer, land price, distance from town and existing land use. Three models of housing development scenario has been developed using different criteria namely: (i) 'Tri Rita Karana' concept, which is concerned with sustainable development, (ii) preservation and environmental barrier; and (iii) current development growth. The first scenario gives the highest acreage of land suitable for housing, followed by the other two models. This is due to the slope factors and risk area were given priority. Uninhabited land were also taken into account that it can be converted in to housing use. Using this method the planners can easily generate different scenario using different set of criteria. The finding thus can be used by planners to assist and guide in making the right decision, particularly for housing development.